



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,349	09/30/2003	William E. Mazzara JR.	GP-304028 2760/134	5776
60770 7590 07/21/2010 General Motors Corporation c/o REISING ETHINGTON P.C. P.O. BOX 4390 TROY, MI 48099-4390				
EXAMINER				
PHUONG, DAI				
ART UNIT		PAPER NUMBER		
2617				
MAIL DATE		DELIVERY MODE		
07/21/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/675,349

Applicant(s)

MAZZARA, WILLIAM E.

Examiner

DAI A. PHUONG

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2010.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 6, 8, 21-23, 26, 28 and 29 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-3, 5-6, 8, 21-23, 26 and 28-29 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Response to Argument

1. Applicant's arguments, filed 04/22/2010, with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Claims 4, 7, 9-20, 24-25, 27 and 30-32 have been canceled. Claims 1-3, 5-6, 8, 21-23, 26 and 28-29 are currently pending.

Claims 1-3, 5-6, 8, 21-23 and 27-29

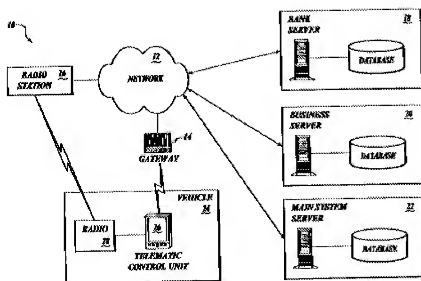
The applicant, on page 5 of the remark, argues that the combination of Odinak '645 and Odinak '547 is missing elements of Applicant's amended claims. More specifically, the combination of Odinak '645 and Odinak '547 does not teach or otherwise suggest Applicant's steps of "extracting a computer-readable command from the digital signal" and "executing the extracted computer-readable command at the call center node" recited, *inter alia*, in claim 1. However, the Examiner respectfully disagrees.

Firstly, the Examiner is broadly and reasonably interpreted "a computer-readable command" is just a command that a server is able to read, extract and execute based up receiving the command. See *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000); *in re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550- 51 (CCPA 1969); *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999), and MPEP 2111.

Secondly, Odinak (Pub. No: 20020143645) teaches in paragraph 27 and Figure. 1 below that when a user is in a vehicle listening to a music which is broadcasting from a radio station 10 and the user requests to purchase a CD of the playing music or request more information about the music. Then, the user utters or says a keyword or phrase, e.g. "PURCHASE." (NOTE: it is a command from the user) Once the user utters or says the "PURCHASE" command in to the

Art Unit: 2617

microphone 38 of the telematic control unit 26, the telematic control unit 26 digitizes the received "PURCHASE" command and sends to a server for voice processing (Extract and Execute). When the server receives the request (command) from the telematic control unit 26, the server processes the request (extract and execute) to purchase the CD by contacting a CD company. In other words, the user requests to purchase a CD of the playing music. The user just utters or says a "PURCHASE" command to telematic control unit. Then, the telematic control unit 22 digitizes the received "PURCHASE" command and sends to the server for voice processing. Once, the server receives the "PURCHASE" command in the signal. The server extracts "PURCHASE" command in the signal in order to determine what kind of request commands the user is requesting. After that, the server executes "PURCHASE" command by contacting the CD's company. Again, the server is able to read, extract and execute the command in the signal which is transmitted from the user in order to perform the request.



Art Unit: 2617

[0027] In one example, a user in a vehicle listening to music wishes to request more information about the music, or wishes to purchase a CD of the playing music. For instance, the song "Candy" is playing on the radio. The display on telematic control unit 26 shows "Candy Everybody . . ." after related information is received from main system 22 via the network and the gateway. The user can request more information, by either pressing a button or uttering a keyword or phrase. For example, the user says "song information." The microphone receives these words, after which telematic control unit 26 digitizes the received words and delivers them to main system 22 for voice processing. Alternatively, the content may have already been downloaded and is simply played to the user. The telematic control unit either responds aurally and/or displays the textual information: "Candy Everybody Wants by 10,000 Maniacs, CD \$7.00, in stock" that is received from main system 22. The user can further request to purchase the CD by either pressing a button or uttering a keyword. Once the user says "Purchase," the telematic control unit sends a request to the server via the network. The server processes the request to purchase the CD by contacting the CD production company using the user's financial service company to complete the transaction. The telematic control unit verbally responds or displays a confirmation, for example: "Your confirmation code is CM1234. The CD will be sent to your address on file." In another example, a user listens to an advertisement for a sandwich restaurant, the user can purchase a sub from the sandwich restaurant by either pressing a button or uttering a keyword, for example: "Buy jumbo club." The request is sent to the server via the Internet, and telematic control unit 26 responds or displays: "The nearest subway location is about 0.7 miles off exit 167 and has a drive-through. Would you like to buy your club sandwich at that location for \$1.99?" The user can then purchase the sandwich, by either pressing a button or uttering "Purchase." Once the user selects to purchase the sandwich, a request is sent to the server via network 12, which processes the request and returns an order number. The telematic control unit displays or responds: "Your order number is 57."

+

The applicant, on page 6 of the remark, argues the Odinak '547 clearly does not include in the transmitted digital voice information a computer-readable command that is extracted and executed at the call center. However, the Examiner relies on Odinak 645 to teach that limitations (see explanation above).

The applicant, on page 6 of the remark, argues amended claim 21 is also distinguishable over the Odinak '645 and Odinak '547. For instance, claim 21 has been amended to recite, *inter alia*, "compressing the digital signal at a particular compression ratio" and "compressing the at least one response at a compression ratio less than the particular compression ratio." This means that the digital signal is sent from the telematics unit to a remote computer-end recipient at a

higher compression ratio than the response. Applicant can find no teaching or suggestion in the cited sections of Odinak '645 or Odinak '547 relied upon in the Office Action that would render obvious Applicant's claims. However, the Examiner now relies on a new reference, Smith (U.S. 7668968), to teach this limitation.

Claims 24-26 and 30-32

The applicant, on page 7 of the remark, argues that Endo has been cited in the Office Action as disclosing "the step of compressing the digital signal prior to the transmitting step to reduce the amount of data transmitted in the data packets from the vehicle to the computer-end recipient."⁴ However, the Examiner now relies on a new reference, Smith (U.S. 7668968), to teach this limitation (see more explanation below).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odinak (Pub. No: 20020143645) hereinafter Odinak 645 in view of Odinak (Pub. No: 20020141547) hereinafter Odinak 547.

Regarding claim 1, Odinak 645 discloses a method for responding to digital vehicle requests, the method comprising:

receiving a voice query at a telematics unit 26 in a vehicle 24 (fig. 1, [0022] and [0027] to [0028]. The user utters or says the keyword or phrase, e.g., “Purchase” or “song information”);

converting the voice query to a signal (fig. 1, [0022] and [0027] to [0028]. The telematic control unit 26 digitized the receiving words and sends to the server);

wherein transmitting the signal from the telematics unit 26 to a computer-end recipient at a call center node in communication with an information database, wherein the signal is sent to the computer-end recipient at the call center node via a digital packet data protocol over a wireless network (fig. 1, [0022] and [0027] to [0028]. The telematic control unit 26 digitized the receiving words and sends to the server via the network 12 and gateway 14);

extracting a computer-readable command from the digital signal (fig. 1, [0022] and [0027] to [0028] The telematic control unit 26 digitized the receiving words and sends to the server via the network 12 and gateway 14. The server processes the request by contacting the CD company);

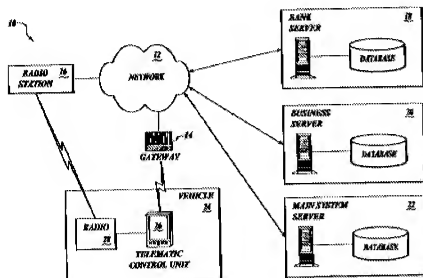
executing the extracted computer-readable command at the call center node (fig. 1, [0022] and [0027] to [0028] The telematic control unit 26 digitized the receiving words and sends to the server via the network 12 and gateway 14. The server processes (extracting and executing the request) the request by contacting the CD company);

accessing the information database based on the computer-readable command (fig. 1, [0022] and [0027] to [0028] The telematic control unit 26 digitized the receiving words and sends to the server via the network 12 and gateway 14. The server processes (extracting and executing the request) the request by contacting the CD company);

formulating at least one response to the computer-readable command using the computer-end recipient (fig. 1, [0022] and [0027] to [0028] The telematic control unit 26 digitized the receiving words and sends to the server via the network 12 and gateway 14. The server processes (extracting and executing the request) the request by contacting the CD company);

transmitting the at least one formulated response format via the digital packet data protocol over the wireless network to the telematics unit (fig. 1, [0022] and [0027] to [0028]. The telematic unit verbally or display a confirmation); and

translating the at least one formulated response to an analog format for playback in the vehicle (fig. 1, [0022] and [0027] to [0028]. The telematic unit verbally or display a confirmation).



However, Odinak 645 does not specifically disclose converting the voice query to a digital signal.

In the same field of endeavor, Odinak 547 discloses converting the voice query to a digital signal ([0024] to [0028]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Odinak 645 by specifically including converting the voice query to a digital signal, as taught by Odinak 547, the motivation being in order to transmit voice input from a remote location over a wireless communication system.

Regarding claim 2, the combination of Odinak 645 and Odinak 547 disclose all the limitations in claim 1. Further, Odinak 645 discloses the method further comprising: optimizing the telematics unit for transmission of the voice query to a computer call center node (fig. 1, [0022] and [0027] to [0028]).

Regarding claim 3, the combination of Odinak 645 and Odinak 547 disclose all the limitations in claim 1. Further, Odinak 547 discloses the method further comprising: filtering the received voice query before converting it to the digital signal ([0024] to [0028]).

Regarding claim 5, the combination of Odinak 645 and Odinak 547 disclose all the limitations in claim 1. Further, Odinak 645 discloses the method further comprising: transmitting the signal to the call center using a cellular packet data connection (fig. 1, [0022]).

Regarding claim 6, the combination of Odinak 645 and Odinak 547 disclose all the limitations in claim 1. Further, Odinak 547 discloses the method further wherein transmitting the at least one formulated response via the digital packet data protocol over the wireless network to the telematics unit comprises: transmitting the at least one formulated response in a digital streaming audio format ([0024] to [0028]).

Regarding claim 8, the combination of Odinak 645 and Odinak 547 disclose all the limitations in claim 1. Further, Odinak 645 discloses the method further wherein transmitting information via the wireless network further comprises transmitting information via an Internet protocol (fig. 1, [0024]).

4. Claims 21-23, 26 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odinak (Pub. No: 20020143645) hereinafter Odinak 645 in view of Odinak (Pub. No: 20020141547) hereinafter Odinak 547 and further in view of Smith (U.S. 7668968).

Regarding claim 21, Odinak 645 discloses a method for responding to digital vehicle requests, comprising step of:

receiving a voice query at a telematics unit 26 in a vehicle 24 (fig. 1, [0022] and [0027] to [0028]. The user utters or says the keyword or phrase, e.g., “Purchase” or “song information”);

converting the voice query to a signal (fig. 1, [0022] and [0027] to [0028]. The telematic control unit 26 digitized the receiving words and sends to the server);

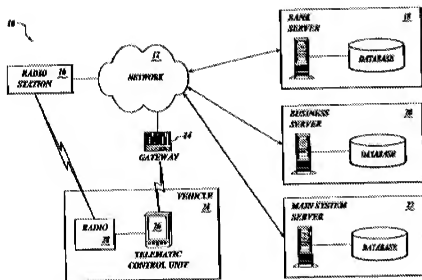
transmitting the signal from the telematics unit 26 to a remote computer-end recipient via a digital cellular packet data protocol (fig. 1, [0022] and [0027] to [0028]. The telematic control unit 26 digitized the receiving words and sends to the server via the network 12 and gateway 14);

parsing the digital signal from using the computer-end recipient to determine an inquiry (fig. 1, [0022] and [0027] to [0028] The telematic control unit 26 digitized the receiving words and sends to the server via the network 12 and gateway 14. The server processes (parsing) the request by contacting the CD company);

formulating at least one response to the inquiry (fig. 1, [0022] and [0027] to [0028]) The telematic control unit 26 digitized the receiving words and sends to the server via the network 12 and gateway 14. The server processes (extracting and executing the request) the request by contacting the CD company);

receiving a transmission of the at least one formulated response at the telematic unit via the digital cellular packet data protocol (fig. 1, [0022] and [0027] to [0028]). The telematic unit verbally or display a confirmation); and

presenting the at least one formulated response (fig. 1, [0022] and [0027] to [0028]). The telematic unit verbally or display a confirmation).



However, Odinak 645 does not specifically disclose converting the voice query to a digital signal; and compressing the digital signal at a particular compression ratio; and compressing the at least one response at a compression ratio less than the particular compression ratio;

In the same field of endeavor, Odinak 547 discloses converting the voice query to a digital signal ([0024] to [0028]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Odinak 645 by specifically including converting the voice query to a digital signal, as taught by Odinak 547, the motivation being in order to transmit voice input from a remote location over a wireless communication system.

However, the combination of Odinak 645 and Odinak 547 do not disclose compressing the digital signal at a particular compression ratio and compressing the at least one response at a compression ratio less than the particular compression ratio.

In the same field of endeavor, Smith discloses VOIP application 30 compressing the digital signal at a particular compression ratio and VOIP application 32 compressing the at least one response at a compression ratio less than the particular compression ratio (Fig. 3, col. 4, line 20 to col. 5, line 25. VOIP applicant 30 transmits voice data a particular ratio. When it detects its bandwidth increases, the VOIP application 30 adjusts its audio compression ratio correspondingly. Likewise VOIP applicant 32 also detects its bandwidth decreases and the VOIP application 32 adjusts its audio compression ratio correspondingly. It is obvious that when the VOIP application 32 detects its bandwidth reduces, it may adjust its compression ratio less than the VOIP application 30 in order to improve the quality of audio. While the VOIP application 30 detects its bandwidth is good or increase, it may change its compression ratio more than the compression ratio of the VOIP application 32)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Odinak 645 by specifically including compressing the digital signal at a particular compression ratio; and compressing the at least one response at a compression ratio less than the particular compression ratio, as taught by Smith, the motivation being in order to improve the quality of audio and decreasing cost of using wireless data.

Regarding claim 22, the combination of Odinak 645, Odinak 547 and Smith disclose all the limitations in claim 21. Further, Odinak 645 discloses the method further wherein the digital cellular packet data protocol is the digital cellular 3G packet data protocol (fig. 41, [0018] to [0024]).

Regarding claim 23, the combination of Odinak 645, Odinak 547 and Smith disclose all the limitations in claim 21. Further, Odinak 547 discloses the method further wherein the step of transmitting the digital signal to a remote computer-end recipient via a digital cellular packet data protocol, further comprises transmitting the digital signal via a digital streaming audio format ([0024] to [0028]).

Regarding claim 26, the combination of Odinak 645, Odinak 547 and Smith disclose all the limitations in claim 21. Further, Smith discloses wherein the digital signal is compressed with a compression ratio at least twice the compression ratio used to compress the at least at one response (Fig. 3, col. 4, line 20 to col. 5, line 25. VOIP applicant 30 transmits voice data at a particular ratio. When it detects its bandwidth increases, the VOIP application 30 adjusts its audio compression ratio correspondingly. Likewise VOIP applicant 32 also detects its bandwidth decreases and the VOIP application 32 adjusts its audio compression ratio

correspondingly. It is obvious that when the VOIP application 32 detects its bandwidth reduces, it may adjust its compression ratio less than the VOIP application 30 in order to improve the quality of audio. While the VOIP application 30 detects its bandwidth is good or increase, it may change its compression ratio more than the compression ratio of the VOIP application 32).

Regarding claim 28, the combination of Odinak 645, Odinak 547 and Smith disclose all the limitations in claim 21. Further, Odinak 645 discloses the method wherein the parsing step and formulating step are automated by the computer-end recipient (fig. 1, [0022] and [0027] to [0028]).

Regarding claim 29, the combination of Odinak 645, Odinak 547 and Smith disclose all the limitations in claim 21. Further, Odinak 645 discloses the method wherein the presenting step further comprises converting the at least one formulated response to an analog signal and playing the signal as audio through at least one speaker in the vehicle (fig. 1, [0022] and [0027] to [0028]).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

Art Unit: 2617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Dai A Phuong/

Examiner, Art Unit 2617

Date: 07/08/2010